HEADQUARTERS 13th ESC

APPENDIX 10 (Safety) TO ANNEX I (Service Support) TO 13ESC OPORD 08-01 (Base Operation) (U)

(U) SAFETY TAC SOP

1. (U) **PURPOSE**: Provide planning guidance and establish responsibilities to ensure successful implementation of the 13ESC safety program.

2. (U) **REFERENCES**

a. MILPER Message Number 06-035, 1 Feb 2006, Procedural Guidance for Evaluation Safety Requirements Impacting All Officers and NCOs
b. AR 385-10, 23 August 2007 the Army Safety Program
c. AR 385-95, 10 Dec 1999, Army Aviation Accident Prevention
f. DODI 6055.7, 03 Oct 2000, Accident Investigation, Reporting, and Record Keeping
g. FM 5-19 ,August 2006, Risk Management
h. 1st Sustainment Command (Theater) Safety Policy, 28 January 2008
i. 13ESC Commander's Safety Philosophy, 7 Feb 2006

3. (U) **RESPONSIBILITIES:**

A. (U) The 13ESC Safety Manager:

1 (U) Provide overall coordination and monitoring of operational composite risk management activities in the 13ESC operational area.

2 (U) Provide composite risk management assistance to the 13ESC Commander and staff.

3 (U) Provide composite risk management assistance to subordinate units and commands as required.

B. (U) Commanders will use their Unit Safety Officer or NCO to assist unit leaders in conducting composite risk management for operations, tasks and ensure that:

1 (U) Subordinate personnel are trained to standards.

2 (U) Standards are enforced.

3 (U) Risk assessments are performed on all aspects of all operations. This requires an in-depth risk assessment be conducted prior to each

mission. If an in-depth risk assessment cannot be conducted, a hasty risk assessment is the next best option.

4 (U) Daily risk assessments are performed and are provided to the next higher level command.

5 (U) Risk exposure control measures are developed, implemented and enforced.

6 (U) Counter-fratricide measures are integrated into the composite risk management process.

7 (U) Refer risk acceptance decisions, beyond their responsibility, to the proper level of command IAW the matrix below:

- Extremely High Risk — First General Officer in the Chain of Command
- High Risk — Brigade Commander
- Moderate Risk — Battalion/Squadron Commander
- Low Risk — Detachment/Troop/Company/Battery Commander

8 (U) The following additional duty positions are appointed and properly trained and that appointed personnel have sufficient time to fulfill their duties in the field environment:

a) (U) Safety Officer or NCO down to company or equivalent level.

b) (U) Unit Fire Marshals down to company or equivalent level.

c) (U) Local Radiation Protection Officer, for units with radioactive commodities to include CAMs and CADs.)

9 (U) Unit personnel will:

a) (U) Complete training to standards.

b) (U) Perform their duties to standards.

c) (U) Follow all Counter-fratricide measures.

d) (U) Notify their chain of command of hazards they identify and control measures that do not appear to be working.

4. (U) **SAFTY PROGRAM ELEMENTS:**

A (U) General.

1 (U) Safety Stand-Down Days: Historically, most accidents occur in a unit's first 60 days and last 30 days in theater. Commanders will conduct a Safety Stand-Down Day within 30 days of TOA. The intent is not to stand down the entire unit for one day, but to conduct the training over a 7-day period in order to capture all assigned/attached personnel and permit the mission to continue. Topics will include: OIF Accident Statistics, AMV/ACV/NTV vehicle operations, maximum speed limits, vehicle limitations, roll-over/egress training, mandatory vehicle seatbelt/restraint use, convoy operations, negligent discharge prevention and weapon clearing procedures, muzzle awareness, weapon status, IED/VBIED/UXO Tactics, Techniques and Procedures (TTPs), force protection postures, fratricide prevention, generator safety, electrical safety, heater operations, fire prevention programs, fire drills fire-extinguisher training, accident reporting requirements, the 13ESC Accident Prevention Campaign Plan, OIF mission-specific lessons-learned and the unit commander's safety philosophy. Commanders will query all subordinates on what hazards and mitigation recommendations they have for tactical and non-tactical operations in which they are involved. Hazards include: risks to mission success, the well-being of our Service Members and the protection of our vehicles and equipment. All Tactical and Non-tactical hazards will be mitigated using a hazard abatement plan. Leaders will use the hazard abatement plan to integrate composite risk mitigation measures into all aspects of mission planning and mission execution phases of their operations. Tactical SOPs, TTP's and policy directives will be updated to include mitigation of identified hazards. An additional Safety Stand-Down Day will be held within 30-60 days of units returning to home-stations. Training conducted will be focused on maintaining appropriate standards to the absolute end of the deployment. The 'end of the deployment' encompasses ongoing mission support/combat operations with the addition of re-deployment preparations, air, sea, land and rail movements, Re-Deployment Safety Briefings reintegration training/pre-briefings, actual troop/equipment movements to home-station, Reintegration Training, Post-Deployment Leaves, equipment/personnel recovery periods, receiving shipped vehicles/equipment, air/ground maintenance reset programs and post-deployment training requirements. Training aids and applicable classes can be found at e Center for Army Lessons Learned at http://call.army.mil/ll-links.asp
or the 13ESC Safety websites.

2 (U) Composite Risk Management: Composite Risk Management (CRM) will be integrated into all phases of tactical and non-tactical operations. CRM responsibilities and composite risk mitigation functions will be clearly defined within each unit. Composite risk assessments must evaluate all factors affecting the mission utilizing METT-TIC (Mission, Equipment, Troops, Time, Terrain, Individual and Civilian) considerations. CRM must be utilized by our first-line leaders and

individual Service Members. CRM teaches our Service Members *how* to think, not *what* to think and ultimately challenges them to be smart on managing risk. We want our Service Members to wake up each day and ask themselves two simple questions: "What could take me out of the fight today? Will it be by enemy contact or by an accident?" Service Members must *internalize* CRM for safety to transcend from nothing more than an afterthought during mission planning to something *instinctive* and *intuitive.* With CRM, our Service Members are more lethal to the enemy, less lethal to themselves and ultimately increase our warfighting capabilities. Residual composite risk levels vary and are dependent on mission hazards, mitigating controls and leadership oversight. The differing residual composite risk levels require appropriate mission approval authorities.

3 (U) Safety Meetings: Ground commanders will conduct quarterly, and aviation commanders will conduct monthly safety meetings in which all Service Members are made aware of evolving TTP's, critical lessons-learned from recent accidents within the unit/theater, Red Hash/Yellow Hash/Green Hash Safety Alerts and the exchange of safety, combatant and command-related information. Safety meetings should be informal/semi-informal gatherings at the platoon, squad or company levels in a training environment that is conducive to open communication between all instructors/leaders and subordinates. Training resources are available at the 13ESC /Safety website or at the Center for Army Lessons Learned at. http://call.army.mil/ll-links.asp

4 (U) Command Safety Councils (CSC): Quarterly Command Safety Council Meetings will be held by all battalion-level commands. CSC membership will be appointed in writing at the discretion of the Battalion commanders. Topics of discussion will include identified tactical and non-tactical operational and safety concerns/hazards and lessons-learned from recent accidents within the command. CSC meeting minutes will address all issues/hazards discussed, discussion highlights and risk mitigators/actions directed by the respective commanders. If issues cannot be resolved at this meeting, the commander will assign an action officer/NCO, task appropriate actions to be completed and provide a suspense date for completion of actions. The CSC minutes will be reviewed and signed by the commander, distributed to all CSC members subordinates and forwarded to the next higher command level).

5 (U) Hazard Reporting: All ground hazards will be annotated on DA Form 4755 (Employee Report of an Unsafe/Unhealthful Working Condition) and all aviation-related hazards will be annotated on DA From 2696-R (Operational Hazard Report). Safety professionals are responsible for managing the hazards reporting program. These completed forms will

be presented to the applicable agency or command that is responsible for correcting the hazard. Responsible commanders will sign and forward hazard reports to the next higher headquarters if recommendations exceed their risk mitigation capabilities. Commanders will review, sign and forward hazard reports within 10 working days of the date received. The original report with actions completed will be returned to the hazard report originator within 20 working days of hazard report submission.

6 (U) Safety Award Program Initiatives: Commanders should develop, fund and implement a safety incentive awards program. Viable safety awards are an integral part of an accident prevention and awareness program. Unit safety award programs should be administered by each Battaion. The safety awards program is established to recognize, and reward individuals, or organizations for achievements in composite risk mitigation which result in safe mission accomplishment, while safeguarding our Service Members and equipment. Awards will be issued to deserving individuals who demonstrate exceptional initiative in mission accomplishment, the safeguarding of his fellow warriors and preservation of our limited resources. Awards may be in the form of certificates of achievement in safety and safety incentive (impact) awards. Commanders will recommend eligible units or Service Members for appropriate awards through channels to their higher headquarters. Requests for any corps-level awards will be staffed through the 13ESC Safety Office.

B. (U) Ground Safety

1 (U) Safe vehicle operations must be an integral part of operations to include proper qualifications, licensing, and identification of hazards associated with road conditions and environment that could be very treacherous.

2 (U) Serviceable and properly fitted Personal Protective Equipment (PPE) must be provided and used by all personnel, as required. PPE includes eye, hand, feet, head, and hearing protection. Flak vests and other body armor are also considered PPE.

3 (U) Lockout/Tagout, Confined Space Entry procedures and electrical distribution systems that will differ from standard practices must be evaluated in all stages of operations to ensure hazards are minimized. Tent Cities that house personnel should be constructed as remotely as possible, to meet separation distance requirements from hazardous operations, such as fuel storage, munitions storage, aircraft live load parking locations, and other hazardous operations.

4 (U) Electrical. Electrical work performed on the tactical vans, ramps, and buildings will be done to the National Electrical Code standard.

Soldiers performing as electricians will be properly trained and certified to perform this type of work by the unit commander. Work on electrical boxes will be done IAW the Lockout/Tagout regulations. Work will not be done on any electrical box when it is hot.

5 (U) Fire Prevention. Fire Marshals/Fire Protection personnel must conduct appropriate fire safety training and briefings that cover actions to be taken in the event of a fire. In addition, conduct routine monitoring during the deployment to detect and correct adverse trends to prevent fires. All personnel must be trained to report fires and to use of fire extinguishers. Construction of tent cities will include fire lanes separating every three rows of tents and life safety code requirements will be met. One 10 pound CO2 and one pressurized water fire extinguisher is the minimum standard for a GP medium tent. Additionally, a 10 pound CO2 will be located every 75 feet in a fixed facility. Personnel capacities will be determined and posted for all facilities.

6 (U) Motor Vehicle Accident Prevention Initiatives: Vehicle operations are the number one accidental killer of our Service Members in Iraq. Excessive speed and inattention are the two primary accident causal factors. Although speed is a technique to minimize time in a kill zone, excessive speed exponentially raises the risk of accidental loss. Commanders will ensure each Service Member is trained and licensed on all vehicles which they operate. The maximum speed limit outside of the FOBs is 45 MPH/72 KPH and seatbelts/restraints will be utilized. Speeds greater-than 45MPH/72 KPH are authorized only if engaged by enemy forces and/or when transporting an Urgent Litter Patient. Leaders must establish, and enforce these parameters based on individual mission profiles and demand individual, crew and first-line supervisor accountability for lack of seat-belt/restraint use, excessive speed and recklessness.

7 (U) Vehicle Rollover Prevention Initiatives: Excessive speed accounted for the vast majority of these rollover accidents. Commanders must integrate composite risk management into all vehicle and convoy operations. Specific directives must be given on appropriate convoy speeds, vehicle spacing and use of seatbelts/restraints. The following command initiatives must be immediately implemented:

a) (U) Commanders will enforce the use of seatbelts and restraints for all wheeled or tracked vehicle missions. No exceptions to this standard are authorized.

b) (U) Accident scenario specifics of all vehicle rollovers occurring in theater will be reported to the first General Officer in the chain of command. The commander responsible for the unit

having the rollover will provide specifics of the accident and risk mitigation measures within 24 hours to prevent future occurrences.

c) (U) Exposed gunners are the most at-risk member during a rollover sequence. Only PM-authorized gunner seats and restraints which enable the gunner to quickly egress below the gunners hatch will be utilized. Rollover drills must be verbally and physically rehearsed prior to all missions. Commanders will eliminate risk for each individual mission by providing specific guidance on limiting the exposure of gunners to IEDs, SAF and vehicle accidents. Depending on the tactical situation, the gunner shall remain as low as possible in the hatch.

d) (U) Convoy commanders will ensure that a proper convoy briefing is provided prior to each convoy. The convoy briefings, at a minimum, will address: weapon status, Rules of Engagement (ROE), Escalation of Force (EOF) directives, actions on contact (Direct Fire, Indirect Fire, IED/SVBIED/VBIED explosions), route of travel, known hazards, vehicle lighting requirements, NVD/NS-use if applicable, breakdown/recovery procedures, MEDEVAC/QRF-request procedures, fratricide-prevention measures, maximum speeds, catch-up speeds, communications requirements, vehicle spacing, rollover drills, lost/separated vehicle procedures, current friendly/enemy situations and seatbelt/restraint use.

8 (U) Negligent Discharge Initiatives: The key to preventing this type of event is proper training and strict enforcement of standards. Training emphasis on this subject must be focused on muzzle awareness, proper clearing procedures, treating all weapons as if they are loaded, and ensuring soldiers are thoroughly trained and qualified on any weapon system they will be handling or employing. Emphasis must be placed on rules of engagement, fratricide prevention, escalation of force training and application scenario training and brief-backs during mission briefings.

briefed on local area flying operations to include unfamiliar field procedures, local weather phenomena, aircraft entry and exit procedures, emergency procedures, foreign object damage (FOD) prevention, bird avoidance procedures, and any other pertinent flying operations.

D. (U) Fratricide Recognition and Prevention.

1 (U) Fratricide is the employment of friendly weapons and munitions with the intent to kill the enemy or destroy his equipment or facilities, which results in unforeseen and unintentional death or injury to friendly personnel. Its basic cause is failure to recognize friendly forces prior to

firing weapons or munitions. The most effective way to prevent fratricide is to raise the recognition level of friendly forces to friendly forces to the rear or either side. It is essential that the employment of aviation be considered in the recognition process. Fratricide is an accident and must be reported and investigated as such. In addition, AR 385-10 requires a Limited Use Safety Accident Investigation and a 15-6 investigation be conducted. The Fratricide Prevention program consists of the following basic elements.

a) (U) Commanders will disseminate (via troop leading procedures and rehearsals) maneuver and fire support control measures to coordinate activities on the ground and in the air.

b) (U) Commanders will tie control measures to recognizable terrain and events, altitudes, or where necessary, create recognizable features so that other friendly units will know where other friendly units are located.

c) (U) Defensive and offensive fire control plans must be developed that designate targets, reference points, engagement areas, and priorities so that targets can be differentiated from friendly forces.

d) (U) Commanders will use weapons control status to reduce the chances of fratricide. The normal HOLD, TIGHT, or FREE would indicate the necessity of an external verification of the fire command or call for fire.

e) (U) Commanders will clear fires through positive control and "eyes-on-target" observation at the lowest possible level.

f) (U) Leaders will use positive navigation control measures to prevent units from straying out of sector, reporting wrong locations or becoming disoriented. This will prevent units from employing fire support weapons from wrong locations or colliding or engaging each other erroneously.

g) (U) Leaders will generate timely, accurate, and complete reports and track subordinates as locations and tactical situation changes. This will provide the leader with accurate situational awareness if the battle field. This will prevent erroneous clearance of support weapons and violations of danger close.

h) (U) Vehicle commanders, gunners and attack pilots will be able to distinguish friendly and enemy thermal and optical signatures near the maximum range of their weapons systems. During limited

visibility or in restricted terrain units must use visual recognition to determine friendly or enemy forces.

i) (U) Altitude minimums and maximums must be designated to separate fixed and rotary wing aircraft.

j) (U) Identify Friend or Foe (IFF) devices should be used for aircraft identification. Commanders will ensure that identification codes are coordinated so proper recognition can be made.

k) (U) Commanders may use ground burning illumination, WP, beacons, colored smoke, and strobes (w/IR filter) for identification of units. These devices have been used successfully in the past and can be used to reduce risk, when the tactical situation permits.

l) (U) There are several marking devices that may be used. These devices include:

1) (U) Budd and Darpa lights are strobe lights, near the Infrared, for strap on vehicle or personnel use. They are visible at night up to 6 to 8 kilometer using image intensifying night vision goggles.

2) (U) GLINT Tape is an Infrared reflective tape that can be used to identify ground forces.

3) (U) Chemical lights can be used to mark vehicles or personnel.

4) (U) No Power Thermal Target (NPTT) tape when viewed by a thermal sight at close range offers distinct image that appears as the reverse polarity of the thermal image. When viewed by he thermal sights in the white hot mode, the tape is seen as a black image on white vehicle background. The inverted "V" is the best design for the tape.

5) (U) Numbers, chevrons and half chevrons may be painted on a flat surface fixed to the side of vehicles 20x20 square inches or for the rear of vehicles on a surface of 30x30 square inches. When the symbol is communicated to friendly units vehicles using the symbols will be recognized as friendly.

E (U) Ammunition/Explosives Safety

1 (U) Ensure all ammunition and explosives are properly transported, accounted for, stored, maintained, inspected, issued, and turned-in IAW approved specific directives.

2 (U) Establish procedures to identify Electro-Magnetic Radiation (EMR) emission sources and ensure clearance requirements are adhered to for Electro-Explosive Devices (EEDs) during all phases of operations.

3 (U) Ensure minimum DOD explosives safety standards are met for munitions storage, operating locations, aircraft munitions, ship and EOD operations. Where minimum DOD standards cannot be met, a request for explosives safety waiver must be submitted to 13ESC Safety for approval.

4 (U) Unit Commander must complete and submit Explosives Safety Site Plans for all locations not previously sited and approved for munitions operations IAW specific service competent explosives safety directives, through 13ESC Safety.

F (U) Occupational Safety and Health.

1 (U) Develop a Directed Sleep Plan to ensure fatigue does not hinder mission accomplishment. Fatigue is a known factor in the cause of many mishaps. After 48-72 hours without sleep, personnel become ineffective. Factors that can impact fatigue are water consumption, diet, physical condition, stress, and hygiene.

2 (U) Severe sun burn and heat stroke are considered preventable and reportable mishaps. The use of adequate sun block lotion, such as SPF-15, and keeping exposed skin covered, is highly recommended. Personnel should be encouraged to drink lots of water; 6-9 quarts per day for light duty and 9-15 quarts per day for heavy duty are good standards to follow. In addition, consuming bananas and other foods high in potassium will help replace electrolytes.

3 (U) Many varieties of Animals, Insects, and Hazardous Plants may be prevalent. They could include snakes, spiders, poison ivy, etc. Report all animal or snake bites to medical personnel. Mosquitoes can also be a problem and cause illness or infection. The frequent use of repellents is highly encouraged. Marine life can also cause illness.

G (U) HAZMAT Safety

1 (U) All DA and 13ESC regulations and standards pertaining to HAZMAT Transportation, Storage, Distribution, Collection and Disposal will be complied with.

2 (U) A hazardous spills response plan must be established that incorporates maximum protection of environment/personnel, proper clean up and disposal procedures, and emergency telephonic emergency notification.

H (U) Radiation Protection.

1 (U) Radiation Protection requires emphasis be placed on the integrity of equipment that contain a radioactive source. Chemical Agent Monitors and Chemical Agent Detectors are two of the most common devices.

2 (U) If a source is damaged all personnel in the immediate vicinity must be identified as potentially exposed. All other personnel must be removed from the site.

3 (U) The unit Local Radiation Protection Officer (LRPO) must be notified and he or she will conduct the evaluation and clean up necessary.

4 (U) If a source is damaged it must be placed in a plastic trash bag with the gloves or items used to pick it up with and any soil in the immediate area. This bag must be labeled as containing a possible radioactive source and then placed in a second bag marked the same way.

5 (U) The unit LRPO or commander must contact the 13ESC Safety Office within four hours of damaging a source and potentially causing a leak of radiation.

6 (U) The LRPO or commander should request further instruction for shipping and handling of suspected sources from the 13ESC Safety Office at DSN 433-2318

7 (U) If an item is damaged during a unit move it is better to following the procedures in (a) through (d) this section and get disposition instructions upon arrival to new location.

I. (U) Recreation Safety. Establish procedures to ensure sports and recreation facilities/activities, and local area hazards are identified, monitored, and personnel informed and afforded protection from potential injury.

J. (U) Accident Reporting.

1 (U) Accident Reporting and Safety Accident Investigation Initiatives: Commanders will aggressively report and investigate accidents in order to determine what happened, why it happened, and what can be done to prevent future occurrences. **All accidents are reportable.** Ensure that the appropriate levels of command are notified of even our most minor mishaps. Statistically, for every single catastrophic accident, there are 60 minor accidents and over 600 near-misses. By capturing lessons learned from our minor mishaps and near-misses, we can prevent the occurrence of catastrophic accidents through appropriate risk mitigation measures.

By-the-book accident reporting and investigation will assist in formulating countermeasures to mitigate hazards to our formations, share critical lessons-learned and prevent future accidents. 13ESC, 311ESC and ARCENT have established the following procedures for reporting and investigating accidents within the AOR:

a) (U) If an accident occurs in Iraq, report the accident through your chain of command to the 13ESC Safety Office DSN:318-433-2318. Reporting can be either telephonic or via the use of the DA Form 7306-R (Ground), 13ESC C-form 7306-R or DA Form 7305-R (Manned and Un-manned Aviation) and will be within 12 hours from the time of the accident. Email addresses for accident reporting follow:

3) (U) Accidents within Kuwait – Units will report through the chain of command to the 311ESC Safety Office, DSN: 318-430-6050.

b) (U) R e-deploying units that have physically departed Kuwait and experience an accident outside of Kuwait while en route to their home station will report the accident through their chain of command to their home station MACOM.

2. (U) In order to enhance accident prevention and preserve combat effectiveness, units will report and investigate all non-hostile accidents throughout the theater. US Army units will conduct formal accident investigations IAW AR 385-10. Units will not report accidents to agencies outside of this Command without approval from the 13ESC DCO. It is essential that accidents are investigated and accident findings and recommendations are provided to the 13ESC Safety office. This will enable accident data to be collated across the theater, and valuable lessons-learned disseminated to all troop contributing nations in order to help prevent further accidents. Formal accident investigation procedures involving our multi-national forces will be carried out IAW applicable service regulations, directives or national standards.

3. (U) All Units will report all accidents IAW appropriate service or national regulations and, additionally, provide telephonic notification (NLT 12 hours after the accident) to the 13ESC Safety Office for all Class A or Class B aviation/ground accidents resulting in a fatality, serious injury resulting in a permanent partial/total disability, three or more soldiers hospitalized in a single accident or property damage exceeding $200,000 US-Dollars. Additionally, all coalition forces will report (NLT 12 hours after the accident) all Class C manned and un-manned aviation accidents exceeding property/airframe damage of $20,000 US dollars (or equivalent).

4. (U) Other-than-Army US services will report and investigate accidents IAW appropriate service regulations or directives. However, a summary of the accident investigation must be submitted to the 13ESC /Safety Office within 75 days of the accident. At a minimum, this summary will include; What happened, Why it happened, What has been done to prevent future accidents of this nature, identified trends, if any and critical lessons-learned.

5. (U) Non-US coalition forces will report all non-hostile accidents resulting in a fatality, serious injury (definitions the same as for casualty reporting), or extensive property damage using the standard accident reporting form 13ESC C-Form 7306-R (non us army/coalition worksheet) submitted to 13ESC Safety office. The 13ESC C-Form 7306-R is intended to be an initial notification report and will be submitted within 24 hours of accident occurrence.

6. (U) All telephonic notifications and copies of accident reports will be provided to the 13ESC Safety office, Joint Base Balad DSN 433-2318 Reports, Serious Incident Reports or Casualty Reports do not satisfy accident reporting requirements. Note: US Army units may use DA Form 7305-R or DA Form 7306-R (as applicable)

7. (U) **Serious Incident Review Brief (SIRB).** 4th SUS BDE establishes a SIRB to gather facts and formulate an effective intervention of potential life threatening situations and prevention of serious or fatal injuries to 4th SUS BDE Soldiers and civilians. The Brigade Commander will host all SIRBs when death occurs and reserve the right to host any serious incidents she deems necessary. Incidents requiring a SIRB at the Brigade Commander level require the following: the unit must schedule the briefing on the Brigade Commander calendar NLT 48 hours after the incident occurs. The SIRB at the Brigade Commander level will be held NLT 5 days after the incident. If outside organizations or other complications prevent timely SIRB review, additional time may be granted. Request for delay will be directed to the 13ESC Deputy Commander..